APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/607,069	06/29/2000	Jie Cheng	200-0382	7285

28395	7590	02/03/2006

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EXAMINER
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ART UNIT	PAPER NUMBER
3629	

DATE MAILED: 02/03/2006

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/607,069
Filing Date: June 29, 2000
Appellant(s): CHENG ET AL.

Matthew M. Jakubowski (reg# 44,801)
<u>For Appellant</u>

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12/7/05 appealing from the Office action

mailed 7/8/05.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

None.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

The amendment after final rejection filed on 9/23/05 has been entered.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Lu declaration dated 2/27/04.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 23,24 and 26-41 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. As to claims 23 and 24, there is no way to ascertain the functions as claimed. Specifically, there is no way for one of ordinary skill in the art to know what to use as a, "constraint for determining a neighbor relationship..." or what to use as a "neighborhood distance function" or how to use this unknown function for, "determining a distance between a pair of used..." or how to, "determine an estimate value... based on the data from the nearest neighbor database..." As to claim 26, there is no way to determine how to, "determin(e) a

weighted estimate value... based on the data from ..." While the claims are to be read in light of the specification, there must be enablement in the claims for the limitations therein. As to claim 31, there is no enablement for the limitation, "...resale plan information". The only mention in the specification to a "resale plan" is on page 9, line 8, and there is no mention as to exactly what is meant by, "resale plan information". As to claims 33,35 and 36, the formulae in claims 33,35 and 36 are incomplete. While they list variables to be used, they do not explain how to use the variables therefore there is no way to use these claims. Due to these unknown functions there is no way to make and/or use the invention. Further, from the claims, it would not be possible for one of ordinary skill in the art to know if they were infringing on the claimed invention.

Claims 26-32, 34 and 37-41 are rejected as depending from a rejected claim.

(10) Response to Argument

As will be discussed more fully, there are numerous problems with the claims.

As to claims 23 and 24, there is no way to understand the following limitations in these claims:

The "data" in line 1 of section A), what is it?

A "nearest neighbor database".

What are the constraints? How are they used?

"K", how many is enough? Too much? What number is optimal?

"N", again, how many is enough? Too much? What number is optimal?

How to determine the estimated value based on an unknown number of unknown data out of an unknown number of values.

As to claim 33, there is no way to understand how to determine the following limitations in this claim:

"V_1".

"N", necessary for V1. How many is enough? Too many? Optimal?

"v_1", what is the resale information? Price? Profit? Length of time until sold? Time of year sold? What is in the used vehicle record? Prices? Repair history? Ownership history? Location? Age? All of these? None of these? Some of these?

"V_2".

"v_2", including the same questions as for v1.

How to determine "$Error_k$", specifically, how to combine the claimed variables. Add them? Subtract them? Multiply them? Divide them? Take a percentage? Some combination?

"f_2", how many are needed? What features? Price? Color? Engine? Accessories?

"Const", what are the constraints and how are they used to determine a neighbor relationship?

"F_d", what is the function? How is it used to determine a distance between a pair of vehicles? How is the term, "distance" used in this limitation?

"K", what is a nearest neighbor value? How is it determined? It doesn't appear, from the claims, to be the same "K" as in as in claims 23 and 24? Is it? If not, what's the

difference? How is one supposed to understand, from the specification, which "K" to use

when?

"Error$_p$", same questions as "Error$_k$" as "Error$_p$" appears to be previous "Error$_k$"s.

Further, "v$_2$" is described as "...equals a target vehicle record" in the list of

variables, but in the final two lines of claim 33, it is claimed with a value that has not

been described.

As to claim 35,

What is V'? How many? How are they neighbors? What is "K", what is v'? How

are "V$_1$", "Const", "F$_d$" and "f$_1$" combined?

How do you determine a weighted estimate using unknown variables?

How can the value of "v$_1$" be used to estimate "v$_1$"? Are they different numbers?

If so, wouldn't one have a different designation, such as "v$_3$"?

How can an error be estimated? From the claims, it would appear to be a

straightforward mathematical operation. "v$_1$" being the estimated value, "v$_{1a}$" being the

actual selling price. The formula would appear to be: Error =("v$_1$"-"v$_{1a}$"). Note that this is

not an estimate. If a user knows both values, how can the difference be an estimate?

As has been discussed in previous actions and above, formulae, necessary to

the invention, are not included in any of the specification, claims or figures and as such,

the claims are not understandable. As to arguments in relation to claim 23, step A does

indeed recite receiving data, however, it does not recite what that data is. It does not

say what is in a "nearest neighbor database" and further, does not include any way to

ascertain K. As appellant notes, "Each used vehicle nearest neighbor record includes

resale information and a plurality of used vehicle features". What is the "resale

information"? Price? Length of time spent before selling? To whom it was sold? Where it

was sold? There is the limitation of "at least one constraint" that is used to determine

the price of the vehicle that is not delineated. The examiner would like to further note

that claim 28, which depends from claim 27 which depends from claim 23, includes the

limitation, "wherein the plurality of vehicle features... include at least two items selected

from the group consisting of... interior color, (sic) and exterior color." It is unclear to the

examiner how the price of a green, 2005 Ford Mustang convertible with a tan interior

would affect the price of a green, 1991 Jeep Cherokee with a tan interior. This is

nowhere explained in the specification or the claims or the figs. Further, in claim 23,

how to determine a "distance between a pair of used vehicles" is accomplished. K is

claimed as being determined "iteratively". Thus, K has been shown to be unknown and

this limitation merely raises new questions. How many iterations are enough? Can there

be too many iterations? Appellant quotes the specification, on pg 6 of the Appeal Brief,

saying, "... The distance between each neighbor vehicle in the neighborhood subset

and the target vehicle whose market value is to be estimated is determined...." How is

the distance determined? What is meant by the term "distance"? How does the

"distance" affect the price of the vehicle? Appellant further quotes, "... However, only a

K number of nearest neighbors in the neighborhood subset are selected based on the

distances calculated..." Again, what is K? What are the distances? How do they affect

K? If the distance is larger, is K smaller? Larger? These issues are unanswered and

thus, the scope of, and enablement for, the claim are not present. Claim 24, is argued

with the same points adding only the use of neural networks. This does not materially change the deficiencies of the claim and thus, will not be argued separately. As to claim 33, as has been discussed in previous actions and more fully above, there is no way to determine V_1, N, f_1, V_2, f_2, K, $error_K$, $error_p$, and other variables listed. The quoted sections of the specification have the same deficiencies as that noted in relation to claims 23 and 24, specifically, the variables are mention but there is no way to determine them. Further, claim 33 claims the limitation of combining these unknown variables in an unknown formula, as shown in the quoted sections of the specification on pgs 9 and 10 of the Appeal Brief. As is argued by appellant on pg 11 of the appeal brief, lines 10-13 (first three lines in paragraph 2), variables are combined but in some fashion but there is nowhere taught how to combine these variables. Add them? Subtract? Divide? Multiply? Some combination of all or some? As to claim 36, appellant writes, "...V' is a group of nearest neighbor vehicles..." How many in the group? What is meant by "nearest neighbor"? Further, on pg 12 of the brief, lines 1 and 2, it is unclear what appellant is trying to say is determined. It appears that V' is determined, but again, there is now way shown to combine unknown variables.

As to the Lu Declaration, mere recitation that variables are supported is not argument. The Lu Declaration fails to enlighten as to how to combine variables to achieve results merely positing that there is support in the specification. As the examiner has tried, throughout prosecution, to explain exactly which parts are unclear, a declaration that actually disclosed how to combine the variables would have been well received.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the

Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,
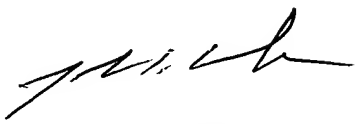
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